DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

4H12
Revision 24
269A
269A-1
269B,269C
269C-1, 269D
April 20, 2001

TYPE CERTIFICATE DATA SHEET NO. 4H12

This data sheet, which is a part of Type Certificate No. 4H12, prescribes conditions and limitations under which the product for which the Type Certificate was issued meets the airworthiness requirements of the Civil Air Federal Aviation Regulations.

Schweizer Aircraft Corporation
P.O. Box 147
Elmira, New York 14902

I - Model 269A Helicopter (Normal Category), Approved April 9, 1959

Engine Lycoming HO-360-B1A, HO-360-B1B, O-360-C2D, HIO-360-B1A or HIO-360-B1B

Fuel 91/96 Minimum grade aviation gasoline

Engine Limits	HP	RPM	MP IN HG	Altitude Feet
HO-360-B1A, -B1B				
Max. Continuous	160	2900	26.0	S.L.
Max. Continuous	160	2900	24.8	4000
Takeoff	160	2900	25.0	To 300 above terrain
Max. power rating (5 min.)	180	2900	Full Throttle	More than 300 above terrain
0-360-C2D				
Max. Continuous	160	2700	26.0	S.L.
Max. Continuous	160	2700	24.8	4000
Takeoff (5 min.)	165	2900	26.0	S.L.
HI0-360-B1A, -B1B				
Max. Continuous	160	2900	26.2	S.L.
Max. Continuous	160	2900	25.2	3700
Takeoff and Max. power (5 min.)	180	2900	Full Throttle	

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Rotor Limits and Engine Operating Speeds	Power Off (Rotor Tach)	Power On (Engine Tach)
(With 269B1145, 269B1145-1, 269B1145-25, or 269A1190 Main Rotor Blades)	Max. 530 rpm Min. 400 rpm	Max. 2900 rpm Min. 2700 rpm
(With other than 269B1145, 269B1145-1, 269B1145-25, or 269A1190 Main Rotor Blades)	Max. 530 rpm Min. 400 rpm	Max. 2900 rpm Min. 2500 rpm

Airspeed Limits (IAS) V_{ne} (Never Exceed) S.L. 86 mph (75 knots)For reduction of V_{ne} with altitude, RPM, and accessories installed - see Rotorcraft Flight Manual.

Altitude Limits Avoid operational areas as shown in the Rotorcraft Flight Manual.

C.G. Range (Longitudinal) Station (95) to (100)
For limits with accessories installed - see Rotorcraft Flight Manual.

C.G. Range (Lateral) See Loading Instructions in Rotorcraft Flight Manual.

Leveling Means Top of Main Rotor Hub

Maximum Weight S/N --0001 through --0008 1550 lbs.
S/N --0011 through --0314 1550 lbs. (Max. weight may be increased to 1600 lbs. if all the following components are installed):

Component	Part Number
Blade Assembly - Main Rotor	269A1131, 269A1131-1, 269B1145, 269B1145-25 or 269B1145-1
Blade Dampers - Main Rotor	269A1222, 269A1927 or 269A1927-3
Engine	Lycoming HO-360-B1A, HO-360-B1B, HIO-360-B1A, or HIO-360-B1B
Landing Gear Assembly	269A3240

S/N --0315 and up 1670 lbs. (See NOTE 1)

No. Seats 2, Station (84.9)

Maximum Cargo See Loading Instructions to Rotorcraft Flight Manual.

Fuel Capacity 25 gal. Sta. (107) (S/N --0001 through--0314)
25 gal. or 30 gal. Sta. (107) (S/N --0315 and subsequent)

Oil Capacity 2 gal. (Sta. 91)

Landing Gear Oleo Pressure 200 psi front and rear (S/N --0011 and subsequent)
75 psi front, 150 psi rear (S/N --0001 through 0008)

Serial Nos. Eligible --0001 through --0008, --0011 and up (See NOTE 6 for Serial Number Coding) Serial Numbers --0650 thru --1109 were manufactured under the Delegation Option Authorization provisions of FAR 21.
Serial Numbers --0315 thru --1109 were delivered to the U.S. Army as TH-55A trainers. Prior to issuance of FAA Certificate of Airworthiness for these Helicopters, conformance with the FAA approved type design data must be established. In addition, all deviations listed on the "Conformity Certificate - Military Aircraft" FAA Form 8130-2 or prior FAA Form 970 for the particular serial number helicopter must be eliminated and FAA approved installations substituted therefore.

The following serial numbered U.S. Army TH-55A Helicopters and their respective data plates have been destroyed: 0317, 0318, 0319, 0321, 0332, 0333, 0340, 0351, 0356, 0389, 0406, 0471, 0472, 0474, 0479, 0480, 0490, 0491, 0492, 0495, 0513, 0515, 0520, 0541, 0545, 0547, 0552, 0562, 0604, 0648, 0652, 0670, 0671, 0686, 0702 and 0709.

II - Model 269A-1 Helicopter (Normal Category), Approved August 23, 1963

Engine Lycoming HIO-360-B1A or HIO-360-B1B
Fuel 91/96 Minimum grade aviation gasoline

Engine Limits	HP	RPM	MP IN HG	Altitude Feet
Max. Continuous	160	2900	26.2	S.L.
Max. Continuous	160	2900	25.2	3700
Takeoff and Max. power (5 min.)	180	2900	Full Throttle	

Rotor Limits and Engine Operating Speeds	Power Off(Rotor Tach)	Power On (Engine Tach)
	Max. 530 rpm	Max. 2900 rpm
	Min. 400 rpm	Min. 2700 rpm

Airspeed Limits (IAS) V_{ne} (Never Exceed) S.L. 86 mph (75 knots)
For reduction of V_{ne} with altitude, RPM, and accessories installed - see Rotorcraft Flight Manual.

Altitude Limits Avoid operational areas as shown in the Rotorcraft Flight Manual.

C.G. Range (Longitudinal) Station (95) to (100)
For limits with accessories installed - see Rotorcraft Flight Manual.

C.G. Range (Lateral) See Loading Instructions in Rotorcraft Flight Manual.

Leveling Means Top of Main Rotor Hub

Maximum Weight 1670 lbs. (See NOTE 1)

No. Seats 2, Station (84.9)

Maximum Cargo See Loading Instructions in Rotorcraft Flight Manual.

Fuel Capacity 25 Gal. or 30 gal. Sta. (107)

Oil Capacity 2 gal. (Sta. 91)

Landing Gear Oleo Pressure 200 psi

Serial Nos. Eligible --0001 and up (See NOTE 6 for Serial Number coding)

III - Model 269A-2 Helicopter (Normal Category), Approved October 10, 1966
Deleted 15 May 1970

IV - Model 269B Helicopter (Normal Category), Approved December 30, 1963
Model 269B Helicopter (Restricted Category), Approved February 1, 1965

Engine	Lycoming HIO-360-A1A
Fuel	100/130 Minimum grade aviation gasoline

Engine Limits	HP	RPM	MP IN HG	Altitude Feet
Max. Continuous	160	2900	23.5	S.L.
Max. Continuous	160	2900	22.0	7200
Takeoff	180	2900	26.1	S.L.
Max. power rating (5 min.)	180	2900	25.0	3900

Rotor Limits and Engine Operating Speeds	Power Off (Rotor Tach)	Power On (Engine Tach)
	Max. 530 rpm	Max. 2900 rpm
	Min. 400 rpm	Min. 2700 rpm

Airspeed Limits (IAS)	Normal Category: V_{ne} (Never Exceed) S.L. 87 mph (76 knots)
	Restricted Category: V_{ne} (Never Exceed) S.L. 66 mph (57 knots) Maximum sideward speed, 10 mph.
	For reduction of V_{ne} with altitude, RPM, and accessories installed - see Rotorcraft Flight Manual.
Altitude Limits	Avoid operational areas as shown in the Rotorcraft Flight Manual.
C.G. Range (Longitudinal)	Station (95) to (101) For limits with accessories installed - see Rotorcraft Flight Manual.
C.G. Range (Lateral)	See Loading Instructions in Rotorcraft Flight Manual.
Leveling Means	Top of Main Rotor Hub
Maximum Weight	1670 lbs. (See NOTE 1)
No. Seats	(Normal Category): 3, (2 at Station 84.9; 1 at Station 78.5) (Restricted Category): 1, Station 84.9 Left Side
Maximum Cargo	See Loading Instructions in Rotorcraft Flight Manual
Fuel Capacity	25 Gal. or 30 gal. Sta. (107)
Oil Capacity	2 gal. (Sta. 91)
Landing Gear Oleo Pressure	200 psi
Serial Nos. Eligible	--0001 and up (See NOTE 6 for Serial Number coding) Serial Numbers --0236 thru --0457 were manufactured under the Delegation Option provisions of FAR 21.

V - Model 269C Helicopter (Normal Category), Approved 15 May 1970
Model 269C Helicopter (Restricted Category), Approved March 14, 1973

Engine: Lycoming HIO-360-D1A

Fuel: 100/130 Minimum grade aviation gasoline

Engine Limits	HP	RPM	MP IN HG	Altitude Feet
For 1900 lbs. Configuration All Operations:	190	3200	25.6	S.L.
(Configuration - a or b of RFM)	190	3200	24.1	4850
For 2050 lbs. Configuration Single RPM	190	3200	26.0	S.L.
Operations: (Configuration - c of RFM)	190	3200	24.7	4200
For Dual Engine RPM Operation	190	3200	26.0	S.L.
	190	3200	24.7	4200
	154	2800-2900	24.5	S.L.

Rotor Limits and Engine Operating Speeds	Power Off (Rotor Tach)	Power On (Engine Tach)
	Max. 504 rpm	Max. 3200 rpm
	Min. 390 rpm	Min. 3000 rpm
		Min. 2800rpm for Dual RPM Operation

Airspeed Limits (IAS): V_{ne} (Never Exceed) S.L. 109 mph (95 knots)
For reduction on V_{ne} with altitude with accessories installed, for dual rpm operation and for restricted category operation, see Rotorcraft Flight Manual.

Altitude Limits: Avoid operational areas as shown in the Rotorcraft Flight Manual.

C.G. Range (Longitudinal): Sta. (95.0) to Sta. (101.0)
For limits with accessories installed, see Rotorcraft Flight Manual.

C.G. Range (Lateral): See Loading Instructions in Rotorcraft Flight Manual.

Leveling Means: Top Of Main Rotor Hub.

Maximum Weight: For reduction of maximum weight with accessories installed and for dual rpm operation see Rotorcraft Flight Manual.

Normal Category: S/N --0004 through --0209 1900 lbs. (See NOTE 1).
Maximum weight may be increased to 2050 lbs. if Modification M10078 is accomplished.

S/N --0210 and up 2050 lbs. (See NOTE 1.)

Restricted Category with Agricultural Kit No. 269A4153 and -3:
S/N --0004 through -0209 1900 lbs. (See NOTE 1.)
Maximum weight may be increased to 2150 lbs. if Modification M10078 is accomplished.

S/N --0210 and up 2150 lbs. (See NOTE 1.)

The landing gear and support structure S/N --0004 and up are not structurally substantiated for operation above 2050 lbs. The cross beams must be inspected following landing above 2050 lbs.

No. Seats	3, (2 at Station 83.2; 1 at Station 80.0)
Maximum Cargo	See Loading Instructions and Limitations in Rotorcraft Flight Manual.
Fuel Capacity	30 gal Sta. (107) 49 gal with Optional Tank Sta. (107) SN: 1743, 1744, 1746 thru 1803. or if modified by incorporation of Kit SA-269K-089 30.0 gal Sta. (108.5) 65.2 gal with Optional Tank Sta. (108.5) SN: 1804 and Subseq. 33.0 gal Sta. (108.5) 66.0 gal with Optional Tank Sta. (108.5)
Oil Capacity	2 gal. Sta. (91)
Landing Gear Oleo pressure	269A3240 "Standard" Landing Gear 350 psi front (P/N 269A3150-5,-15,-19) 560 psi rear (P/N 269A3150-7) 725 psi rear (P/N 269A3150-9, -17, -21) 269A3260 "Extended Height" Landing Gear 350 psi front (P/N 269A3150-23) 560 psi rear (P/N 269A3150-27)
Serial Nos. Eligible	--0004 and up except Serial Number 1246, 1643 and 1660 (See NOTE 6 for Serial Number coding). Serial Numbers --0004 thru --0082 were manufactured under the Delegation Option provisions of FAR 21.

Data Pertinent for Models 269A, A-1, B, C

Datum	100 inches forward of main rotor centerline
Other Operating Limitations	See Rotorcraft Flight Manual. See NOTE 2 for required placards. See NOTE 4 for maintenance.
Main Rotor Blade Movements	(Relative to Rigging Position) Collective travel (all models) $12^{o} \pm 1^{o}$ (low pitch stop to be established in accordance with HMI to obtain proper auto rotation RPM). Model 269A, 269A-1, 269B Cyclic, forward 7.5^{o} to 9.4^{o} aft 6.0^{o} to 7.5^{o} left 6.5^{o} to 7.5^{o} right 5.3^{o} to 6.3^{o} Model 269C Cyclic, forward 8.5^{o} to 9.75^{o} aft 6.5^{o} to 7.5^{o} left 6.5^{o} to 7.5^{o} right 4.5^{o} to 6.5^{o}
Main Rotor Blade Damper Setting	Friction Dampers (269A1222, 269A1927, 269A1927-3. Torque to move the damper shaft through the low load stage: 200 in-lb. minimum, 230 in-lb. maximum.

Tail Rotor Blade Collective Pitch	Models 269A, 269A-1, 269B with 269A6004 or 269A6003 Tail Rotor Assembly $+20^{o}$ $\pm 1^{o}$ (thrust to right); -10^{o} $\pm 1^{o}$ (thrust to left)
	Models 269A, 269A-1, 269B with 269A6034 or 269ASK16 Tail Rotor Assembly $+25^{o}$ $\pm 1^{o}$ (thrust to right); -12^{o} $\pm 1^{o}$ (thrust to left)
	Model 269C with 269A6034-7 Tail Rotor Assembly $+26^{o}$ $\pm 1^{o}$ (thrust to right); -12^{o} $\pm 1^{o}$ (thrust to left)

FAA/DOA APPROVED HELICOPTER FLIGHT MANUALS

Model 269A (configuration "a"), dated June 22, 1966 (FAA), revised 10/15/71 (DOA)

Model 269A-1, dated may 13, 1964, revised December 27, 1971 (DOA)

Model 269A (configuration "b"), dated April 8, 1964, revised 10/15/71 (DOA)

Model 269A (configuration "c"), dated July 9, 1964, revised 12/27/71 (FAA) & 11/30/71 (DOA)

Model 269A (configuration "d"), (U.S. Army TH-55A Primary Trainer), dated 11/5/64, revised 11/8/67, 1/13/71, 11/30/71, 9/28/77, 9/8/77 (DOA), and 3/27/92

Model 269B (configuration "a"), December 30, 1963, revised 11/30/71 (DOA)

Model 269B (configuration "b"), February 5, 1968, revised 11/30/71 (DOA)

Model 269C, dated March 9, 1973, revised 2/24/81, reissued September 21, 1988 revised June 15, 1992, November 3, 1992, October 28, 1993, June 15, 1994, November 4, 1994, August 07, 1995, October 30, 1995, July 5, 1996, February 28, 1997, July 18, 1997, November 12, 1997, March 23, 2000.

Service Life Limits	See NOTE 3 for list of life limited components.
Certification Basis	Models 269A, 269A-1, 269B (Normal Category): CAR Part 6 dated January 15, 1951, including Amendments 6-1 through 6-7 and 6-8, except for CAR 6.604(c). In addition, compliance with CAR 6.401(b) effective May 17, 1958 and CAR 6.637 effective April 1, 1957 has been required, based on the conditions of Director, Bureau of Flight Standards letter dated March 27, 1959, granting extension of effectiveness of Application for Type Certificate until July 1, 1959.
	Model 269B (Restricted Category): CAR Part 8 dated October 11, 1950.
	Model 269C (Normal Category): CAR Part 6 dated 15 January 1951, including Amendments 6-1 through 6-7 and 6-8, except CAR 6.604(c). In addition, compliance with CAR 6.401(b) effective 17 May 1958, CAR 6.637 effective 1 April 1957 and FAR 27.1323 of Amendment 27-2 effective 25 February 1968 in lieu of CAR 6.612(a) has been required. Model 269C was approved under the Delegation Option Authorization Provisions of FAR21.
	Model 269C (Restricted Category): FAR 21.25 dated February 1, 1965.
	Type Certificate 4H12 issued April 9, 1959. Date of Application for Type Certificate, January 23, 1956.
Production Basis	Production Certificate No. 101.

Equipment The basic required equipment as prescribed in the applicable airworthiness regulations (See Certification Basis) must be installed in the helicopter for certification. All required equipment that must be installed as well as optional equipment installations are listed in the following Hughes/Schweizer reports:

JW-00-1	"Equipment List, Model 269A Helicopter"
HTC-63-19	"Equipment List, Model 269A-1 Helicopter"
269B-X-8001	"Equipment List, Model 269B Helicopter" (including conversation instructions for Model 269B CAR Part 6 or Part 8 certification basis).
JX-80-45	"Equipment List, Model 269C Helicopter" Configuration a.
JX-80-42	"Equipment List, Model 269C Helicopter" Configuration b.
JX-80-43	"Equipment List, Model 269C Helicopter" Configuration c.
SA-269C-22-4	"Equipment List, Model 269C Helicopter S/N 1796 – Subseq."

VI - Model 269D Helicopter (Normal Category). Approved September 14, 1992

See item VI(a) for optional Model 269D Configuration A

Engine: Rolls-Royce 250-C20W Gas Turbine

Fuel: Grade JP-4 or JP-5 per MIL-T-5624,
Jet A, A-1, or B per ASTM D-1655, and
Grade JP-8 per MIL-T-83133.

Refer to Rotorcraft Flight Manual and/or Rolls-Royce Operation and Maintenance manual for limitation and special operating conditions.

Engine Limits: 220 HP Maximum Continuous, 57.8 psi Torque,
738°C maximum TOT.
Take off: 235 HP 5 min. Limit, 61.7 psi Torque
810°C maximum TOT. maximum N_1 = 105% rpm
N_1 idle speed: 59% to 65%
100% N_1 = 50,970 RPM
TOT limits: Start up and shut down - 810°C to 927°C for 10 sec
Installed Power Turbine Limit (91% N_2) = 30,294 RPM
Installed Power Output Shaft Limit (91% N_2) = 5,475 RPM

Rotor Limits and Engine Operating Speeds: Normal Operating Range: 466 RPM to 471 RPM (90% N_2 to 91% N_2)
Max. RPM: Power On - 471 RPM (91% N_2)
Min. RPM: Power On - 466 RPM (90% N_2)
Max. RPM: Power Off - 504 RPM
Min. RPM: Power Off - 410 RPM

Airspeed Limits: V_{ne} (Never Exceed) Sea Level 108 KIAS Power-On / 94 KIAS during Autorotations
For reduction of V_{ne} with altitude, see Rotorcraft Flight Manual
Limits unchanged for any combination of cabin doors on or off

Altitude Limits: Avoid operational areas shown in the Rotorcraft Flight Manual
Max. Certified Pressure Altitude: - 10,000ft
- 12,800ft. equip. with 269A1002-11 Main Rotor Inst. and 269D7100-3 "ext. height" Landing Gear

C.G. Range (Longitudinal)
Fwd: 94.1 inches at 2230 lbs varying linearly to 92.0 inches at 1750 pounds and below.
Aft: 96.0 inches at 2230 lbs varying linearly to 101.0 inches at 1750 lbs and below.

(Lateral)	Right:	Buttline +2.4 inches at 2230 lbs varying linearly to +4.5 inches at 1750 lbs and below
	Left:	Buttline -0.9 inches at 2230 lbs varying linearly to -3.0 inches at 1750 lbs and below
C.G. Range	Equipped with 269A1002-11 Main Rotor Inst. and 269D7100-3 “extended height” Landing Gear	
(Longitudinal)	Fwd:	94.2 inches at 2260 lbs varying linearly to 92.0 inches at 1800 pounds and below.
	Aft:	96.0 inches at 2260 lbs varying linearly to 101.0 inches at 1800 lbs and below.
(Lateral)	Right:	Buttline +2.4 inches at 2260 lbs varying linearly to +4.5 inches at 1800 lbs and below
	Left:	Buttline -0.9 inches at 2260 lbs varying linearly to -3.0 inches at 1800 lbs and below
	Lateral "+" CG is right of aircraft centerline, "-" is left of aircraft centerline when looking forward.	
Leveling Means	Top of Main Rotor hub	
Datum	100 inches forward of main rotor HUB centerline	
Maximum Weight	Normal Category Operations - 2230 lbs - 2260 lbs equip. with 269A1002-11 Main Rotor Inst. and 269D7100-3 "ext. height" Landing Gear	
No. of Seats	3 Place Configuration (2 at Station 68.6, 1 at Station 78.6) 4 Place Configuration (2 at Station 68.6, 2 at Station 78.6)	
Controls	Solo flight & P.I.C. - Refer to rotorcraft flight manual. Refer to Rotorcraft Flight Manual when three sets of controls are installed.	
Max. Cargo	Stowage Area Behind R/H Seat sta. 84.0 - Limited to 50 lbs Stowage Area Behind L/H Seat sta. 84.0 - Limited to 50 lbs Optional Remote Baggage Compartment sta. 125.0 - Limited to 60 lbs	
Fuel Capacity	Standard Capacity - 60.8 U.S. Gallons (Station 104.20), (60.0 Gal usable) Unusable Fuel - 0.8 U.S. Gallons	
	Extended Range Capacity - 74.1 U.S. Gallons (Station 104.20), (73.0 Gal usable) Unusable Fuel - 1.1 U.S. Gallons	
Engine Oil Capacity	4.5 Quarts (Oil Tank Capacity 3.0 Quarts) (Station 114.40)	
Engine Oil Type	MIL-L-7808 (reference Roll-Royce Maintenance Manual 10W2) MIL-L-23699	
Engine Oil Limitations	Continuous operating range 0^{o}C to 107^{o}C Oil Pressure 50 - 130 psi with following minimums: 90 psi at or above 79% N_1 50 psi below 79% N_1	

Landing Gear Oleo Pressure	269A3240-9 Landing Gear 350 psi Front (P/N 269A3150-15, -19) 725 psi Rear (P/N 269A3150-9, -17, -21) 269D7100-3 “extended height” Landing Gear 350 psi Front (P/N 269A3150-23) 725 psi Rear (P/N 269A3150-25)
Starter/Generator Limits	150 amps maximum continuous operation. Consecutive Cranking Limits: 60 seconds - ON 60 seconds - OFF 30 seconds - ON 60 seconds - OFF 30 seconds - ON 30 minutes - OFF
Operating Limitations	If configured with external screened engine plenum inlet, Alternate Air must be selected for all operations in visible moisture at temperatures at or below 5^{o}C. After alternate air door is selected for operation in visible moisture at or below 5^{o}C, the door must remain open until after landing and the primary air inlet and the forward and aft bulkheads located at the rear station of the engine bellmouth are inspected and cleared of ice accumulation. Flight into known icing is prohibited. Instrument flight is prohibited. Refer to Rotorcraft Flight Manual for solo requirements.
Other Operating Limitations	See Rotorcraft Flight Manual. See Note 2 for required placards. See Note 4 for maintenance information.
Serial Numbers Eligible	-0001 and subsequent except Serial No. 0007, 0013, 0011 and 0017
Main Rotor Blade Movement	Collective Pitch: Full Travel 12^{o} +/- 1^{o} At Down Stop 0.75 R, 2.5^{o} +/- 1.5^{o} (low pitch stop to be established in accordance with HMI to obtain proper auto rotation RPM). Cyclic, forward 8.5^{o} to 9.5^{o} aft 9.5^{o} to 10.0^{o} left 6.5^{o} to 7.5^{o} right 6.0^{o} to 7.0^{o}
Tail Rotor Blade Collective Pitch	Established at 3/4 radius, Right Pedal (thrust to left) 11^{o} to 13^{o} Left Pedal (thrust to right) 27^{o} to 29^{o}
Service Life Limits	See Note 8 for life limited Components

Certification Basis

The certification basis for the Model 269D includes that of the 269C CAR Part 6, dated January 15, 1951, including Amendment 6-1 through 6-7, and 6-8 except CAR 6.604(c). Compliance with CAR 6.401(b) effective 17 May 1958, CAR 6.637 effective 1 April 1957 and FAR 27.1323 Amendment 27-2 effective 25 February 1968 in lieu of CAR 6.612(a) has been shown. Applicable FAR requirements covering the turbine engine installation per FAR 27 thru Amendments 27-21 in effect at time of application (November 3, 1987) and noise standards per FAR 36 at time of certification are:

FAR 21.35(b)(2) ; 27.73(a)(2)(ii); 27.361(a); 27.395; 27.397; 27.399; 27.671; 27.901(b)(4)(c); 27.903(c); 27.907; 27.931; 27.939; 27.951(c); 27.955; 27.959; 27.961; 27.963; 27.965; 27.969; 27.971; 27.973; 27.975; 27.977(a)(2)(b)(c)(d); 27.993; 27.995; 27.997; 27.999; 27.1013(c); 27.1015; 27.1019; 27.1091(d)(e); 27.1093(b); 27.1121; 27.1141(d); 27.1143(d); 27.1145(b); 27.1191(a); 27.1194; 27.1195; 27.1305(f)(g)(n thru s); 27.1323; 27.1353(f)(g); 27.1461; 27.1521(b)(5), (c)(3)(d thru f); 27.1529; 27.1557(c)(i)(iii); 27.1583(b)(1); FAR 36 Appendix J, Amendment 20.

Production Basis

Production Certificate No. 101

Equipment

The required equipment as prescribed in the applicable airworthiness regulations (see Certification Basis) must be installed in the helicopter for certification. All required equipment that must be installed as well as optional equipment installations are listed in Schweizer Report No. SA-269D-22-2.

FAA APPROVED HELICOPTER FLIGHT MANUAL
CSP-D-1 (60 gallon fuel system)
Model 269D, dated September 14, 1992. Reissued July 28, 1993.
Revision Dec. 22, 1993; Jan. 25, 1994; April 13, 1994; June 24, 1994; July 15, 1994; Nov. 28, 1994; March 29, 1995; May 22, 1995, Feb 15, 1996, March 20, 1997, May 15, 1997

CSP-D-7 (73 gallon fuel system)
Model 269D, dated November 16, 1993. Revision January 25, 1994, June 9, 1994, July 15, 1994, July 24, 1994, August 17, 1995, February 15, 1996, March 20, 1997, May 15, 1997.

VI (a) - Model 269D Configuration A Helicopter (Normal Category). Approved September 28, 2000
data same as for standard configuration (item VI) except as shown

Engine Limits

232 HP Maximum Continuous, 62.2 psi Torque,
738^{o}C maximum TOT.
Take off: 253 HP 5 min. Limit, 67.6 psi Torque
Transient Over Torque: 263 HP 15 sec. Limit, 70.3 psi Torque
810^{o}C maximum TOT. maximum N_1 = 105% rpm
N_1 idle speed: 59% to 65%
100% N_1 = 50,970 RPM
TOT limits: Start up and shut down - 810^{o}C to 927^{o}C for 10 sec
Installed Power Turbine Limit (90% N_2) = 29,961 RPM
Installed Power Output Shaft Limit (90% N_2) = 5,414 RPM

Rotor Limits and Engine Operating Speeds

Normal Operating Range: 466 RPM to 471 RPM (89% N_2 to 90% N_2)
Max. RPM: Power On - 471 RPM (90% N_2)
Min. RPM: Power On - 466 RPM (89% N_2)
Max. RPM: Power Off - 500 RPM
Min. RPM: Power Off - 410 RPM

Airspeed Limits	V_{ne} (Never Exceed) Sea Level: 110 kias Power-On (2301-2550 lbs G.W.) 120 kias Power-On (2300 lbs and below) 94 kias during Autorotations 110 kias Doors-Off Operation (any combination cabin door(s) off) For reduction of V_{ne} with altitude, see Rotorcraft Flight Manual
Altitude Limits	Avoid operational areas shown in the Rotorcraft Flight Manual Max. Certified Pressure Altitude: - 13,000 ft
C.G. Range (Longitudinal)	Fwd: 94.0 inches at 2550 lbs varying linearly to 92.0 inches at 2000 lbs and below. Aft: 96.0 inches at 2550 lbs varying linearly to 101.0 inches at 2000 lbs and below.
(Lateral)	Right: Buttline +2.0 inches at 2550 lbs varying linearly to +4.0 inches at 2000 lbs and below Left: Buttline –1.0 inches at 2550 lbs varying linearly to -3.0 inches at 2000 lbs and below Lateral "+" CG is right of aircraft centerline, "-" is left of aircraft centerline when looking forward.
Maximum Weight	Normal Category Operations - 2550 lbs Take-Off and Landing above 4,000 ft density altitude limited to 2,500 lbs or less
Landing Gear	350 psi Front (P/N 269A3150-23) 725 psi Rear (P/N 269A3150-25)
Serial Numbers Eligible	Optional configuration for production helicopters SN 0026 and subsequent and for all other helicopters incorporating Retrofit Kit no. SA-269D-K-20. Production Configuration A helicopters have "-A" at the end of S/N. Retrofit Configuration A helicopters have no "-A" at the end of S/N. Both production and retrofit helicopters have an additional "Configuration A" Data Plate affixed next to standard data plate.
Tail Rotor Blade Collective Pitch	Established at 3/4 radius, Right Pedal (thrust to left) 11^{o} to 13^{o} Left Pedal (thrust to right) 28^{o} to 29^{o} FAA APPROVED HELICOPTER FLIGHT MANUAL CSP-D-8 Model 269D Configuration A, dated September 28, 2000.

VII - Model 269C-1 Helicopter (Normal Category) Approved July 31, 1995

Engine	Textron Lycoming HO-360-C1A, FAA Type Certificate E-286				
Fuel	Grade 100/130 (green) or 115/145 (purple) or 100LL (blue), MIL-F-5572; Minimum grade aviation gasoline.				
Engine Limits		HP	RPM	MP IN HG	Altitude Feet
	Max. Continuos	180	2700	Full Throttle	S.L.

Rotor Limits and Engine Operating Speeds	Power Off (Rotor Tach) Max. 504 rpm Min. 390 rpm	Power On (Engine Tach) Max. 2700 rpm Min. 2534 rpm
Airspeed Limits	Vne(Never Exceed); S.L. 94 knots (108 mph) Vne with Doors-Off; 90 knots (104 mph) For reduction of Vne with altitude see Rotorcraft Flight Manual	
Altitude Limits	Takeoff/Landing - 8,000 ft density altitude Enroute - 10,000 ft density altitude	
C.G. Range (Longitudinal)	Station (95.0) to Station (101.0)	
C.G. Range (Lateral)	See Loading instructions in Rotorcraft Flight Manual	
Leveling Means	Top of Main Rotor Hub	
Datum	100 inches forward of Main Rotor centerline	
Maximum Weight	1750 lbs	
No. Seats	2, (2 at station 83.2) Right Hand PIC 3, (2 at station 83.2, 1 at station 80.0) Left Hand PIC	
Maximum Cargo	See Loading Instructions and Limitations in Rotorcraft Flight Manual.	
Fuel Capacity	S/N 0001 thru 0105 Standard Total Capacity 35.2 U.S. gallons, station 108.5 Usable Capacity 35.0 U.S. gallons, station 108.5 Standard + Auxiliary (optional) Total Capacity 65.2 U.S. gallons, station 108.5 Usable Capacity 63.0 U.S. gallons, station 108.5 S/N 0106 and Subsequent Standard Total Capacity 33.0 U.S. gallons, station 108.5 Usable Capacity 32.5 U.S. gallons, station 108.5 Standard + Auxiliary (optional) Total Capacity 66.0 U.S. gallons, station 108.5 Usable Capacity 64.0 U.S. gallons, station 108.5	
Oil Capacity	2.0 gallons, station 91	
Landing Gear Oleo Pressure	350 psi front (P/N 269A3150-19) 725 psi rear (P/N 269A3150-21)	
Serial Nos. Eligible	- 0001 and subsequent except Serial No. 0013	

Main Rotor Blade Movements	(Relative to rigging position) Collective Travel 12° ± 1° (low pitch stop to be established in accordance with HMI to obtain proper auto rotation RPM). Cyclic, forward 7.5° to 9.4° aft 6.0° to 7.5° left 6.5° to 7.5° right 4.5° to 6.5°
Tail Rotor Blade	+26° ± 1° (thrust to right); -12° ± 1° (thrust to left)
Service Life Limits	See Note 9.
Certification Basis	(Normal Category): CAR Part 6 dated 15 January 1951, including Amendments 6-1 through 6-7 and 6-8, except CAR 6.604(c). In addition, compliance with CAR 6.401(b) effective 17 May 1958, CAR 6.637 effective 1 April 1957, FAR 27.1323 of Amendment 27-2 effective 25 February 1968 in lieu of CAR 6.612(a), and noise standards per FAR Part 36 Appendix J, Amendment 20 has been shown.
Other Operating Limitations	See Rotorcraft Flight Manual. See NOTE 2 for required placards. See NOTE 4 for maintenance.
Equipment	The basic required equipment as prescribed in the applicable airworthiness regulations (See Certification Basis) must be installed in the helicopter for certification. All required equipment that must be installed as well as optional equipment installations are listed in the Schweizer Report SA-269C-22-5.

Production Basis-Production Certificate No. 101

FAA APPROVED HELICOPTER FLIGHT MANUAL
CSP-C1-1
Model 269C-1, dated July 31, 1995, revised November 8, 1995, April 17, 1996, July 18, 1996, August 14, 1996, February 28, 1997, March 28, 1997, December 12, 1997, January 8, 1998, November 12, 1998, July 23, 1999, March 23, 2000

Note: Applicable To All Models Except When Specifically Indicated

NOTE 1. Current weight and balance report, including list of equipment including certificated empty weight and loading instructions, must be provided for each helicopter at the time of original airworthiness certification and at all times thereafter (except in the case of operators having an appropriate weight control system). Ballast, when necessary, must be carried in accordance with the loading instructions in the Rotorcraft Flight Manual.

NOTE 2. The following placard must be installed in clear view of the pilot:

"This Helicopter must be operated in compliance with the operating limitations specified in the pertinent Rotorcraft Flight Manual."

For additional placards, see the pertinent Rotorcraft Flight Manual.

NOTE 3. (a) The retirement times of critical parts are listed in the following table. These values of retirement or service life cannot be increased without approval by FAA Engineering. (See NOTE 8 for Model 269D & Note 9 for Model 269C-1)):

Description	Part Number	Model 269A S/N 0001 thru 0008 Hours	Model 269A S/N 0011 & Subs. Models269A-1 & 269B S/N 0001 & Subs. Hours	Model 269C S/N 0004 & Subs. Hours
Blade Assembly - M/R	269-1100	1366		
	269A1125		1366	
	269A1131	1366	1366	
	269A1131-1	1366	1366	
	269A1160			5500
	269A1185-1			5500
	269A1190		5500	
	269A1190-1		5500	
	269B1145		1366	
	269B1145-1		1366	
	269B1145-25		1366	
Pitch Brg. Shaft - M/R	269A1240-7			3600
Dampers-Elastomeric - M/R See Note 3(e)	269A1290-1, –3		6000	6000
Mast - M/R	269-2165	1900		
	269A2010-5, -19			13590
Thrust Bearing - M/R	269A5050-73		3000	
	269A5050-63, -95			3000
	269A5050-50, -51	300	300	
Tail Boom Assy (when 269ASK16 or 269A6034 T/R is installed)	269A2320 with 269A2324 –13, -11 center attach fitting installed		17370	
	269A2320 with 269A2324 Basic, -7 center attach fitting installed		4100	
Tail Boom Assy	269A2320-7 with 269A2324-11 center attach fitting installed			2100
	269A2320-7 with 269A2324-7 center attach fitting installed			500
	269A2320-9		17370	
	269A2320-11			2100
	269A2320-17			4200
	269A2320-19			2100
Tail Boom Struts (see note 3F)	269A2015-5			500
	269A2015-11, -13, -15, -17			10700
Stab. Assy - Vert.	269A2419-3			20540
Stab. Assy - Horiz.	269-2500	2500		
	269A2511		2500	
(when 269A2516 zero time Stab. is installed with 269ASK16 or 269A6034 T/R)	269A2516		2500	
	269A2516		3070	
	269A2516-9			2500
	269A2516-21			4200

Main Gear Box Pinion Assy	269-5103	2250		
	269A5103		6000	6000
	269A5103-9		6000	6000
	269A5103-21		6000	6000
	269A5103-31, -41, -51		6000	6000
Main Rotor Drive Shaft	269-5301	1195		
	269A5305-3, -103		3000	
	269A5305-11, -111			1900
Carrier Assembly-Ring Gear, see item 3h	269A5194	6000	6000	6000
Lower Pulley Coupling Shaft	269-5412	1500		
Lower Pulley Coupling Shaft (269A5504-5 Assy)	269A5504-3		1500	1500
Lower Pulley Coupling Shaft (269A5559 Assy)	269A5559-3		6000	6000
Idler Pulley Bearings	269A5050-58		200	
	269A5050-62			600
Shaft - Input T/R GB	269-5609	1800		
	269A5609		3000	
See NOTE 3(d)	369A5406		UNLIM.	8600
See NOTE 3(d)	369A5425, -3, -5		UNLIM.	8600
	269A5626-3, -5			8600
Drive Spline - Aft End	269-5607	1800		
T/R Drive Shaft	269A5607		3000	
Shaft Assy - T/R Drive	269-5701	3000		
(includes end fittings)	269A5601, -3		3000	
Shaft Assy - T/R Drive	269A6040		3000	
	269A6040-5		3000	
	269A6040-7			6000
	269ASK09		3000	
Spline Adapter Fitting	269ASK04		20000	
Blade Assy - T/R	269A6035, -17, -21		5000	
	269A6035M		5000	
	269ASK15		5000	
	269A6035-9, -19, -23			9000
	269-6100	960		
	269A6124		960	
	269A6124-9		960	
Retention Straps - T/R	369A1706		2800	3540
	269A6065		2800	3540
	269A6065-507		2800	5100
	369A1706-505, -507		2800	5100
Torsion Shaft - T/R Blade (Note 7)	269-6108	1200		
	269A6108		1200	
	269A6219		1200	
Hub - T/R	269-6204	960		
	269A6221		960	
	269A6247		960	
Bellcrank - Lat. Pitch	269-7506	900		
Idler Mixer	269A7506		900	

NOTE 3. (b) It is prohibited to interchange life limited components between different series of helicopters (i.e. 369/269). Components which have been interchanged between series of helicopters prior to revision 19 of this TCDS may continue in service to their respective retirement lives. Life limited components interchanged between Models, configurations, or previously between series must be restricted to the lowest service life indicated for the Models or configurations affected. Parts are applicable only on Models under which a service life is listed. Interchanged components with known service hours but without Model application identification may not exceed the lowest life listed for any applicable Model. If the service hours are not known, regardless of Model application, the component cannot be interchanged to Models that list the component as limited life.

(c) Life limited components removed when life limit has been reached must be destroyed or permanently marked to prevent return to service.

(d) Input Gearshaft assy. T/R, P/N 369A5406 (Input Only), 369A5425 and 369A5425-3 having accumulated any Military (OH-6A Model 369A) time in service must be limited to a total service life of 530 hours.

(e) (Elastomeric Dampers) Mandatory inspection required in accordance with the 269 Series "Helicopter Maintenance Instruction" (HMI) requirements at 600-hour intervals for operation up to 4200 hours and at 300-hour intervals thereafter to a total damper operational service time of 6000 hours. For Models 269A, 269A-1 and 269B Main Rotor Elastomeric Dampers P/N 269A1290 can only be used with Main Rotor Blades P/N 269A1190-1.

(f) AD 76-18-01 required modifying 269A2015-5 to 269A2015-11 configuration within 500 hours or by September 7, 1977 in any case.

(g) Alpha and/or numeric suffixes added to part numbers denote special manufacturing or handling procedures and do not alter the replacement requirements of the part. For example, 269A5305-11 and 269A5305-11M2 are subject to the same requirements.

(h) 269A5193 Carrier is part of 269A5194 Carrier Assembly

NOTE 4. Information essential to the proper maintenance of these helicopters is contained in the Manufacturer's Handbook of Maintenance Instructions, which is provided with each helicopter.

NOTE 5. Deleted.

NOTE 6. Aircraft serial numbers are coded to show the month and year of manufacture sequence.

EXAMPLES: 640103, 1150015

6	4	0103
11	5	0015
		Serial number in consecutive order from 0001 for each model
	Year of Manufacture 4 - 1964 5 - 1965	
Month of Manufacture	6 - June 11 - November	

Model 269C Helicopters, S/N 1065, S/N 1075 and subsequent will be delivered without the manufacturing date coding as part of the serial number. Serial numbers are prefixed by the letter "S" starting with S/N S1166 and up.

NOTE 7. The limited service life for all P/N 369A1706 or 269A6065 tension torsion strap assemblies used on any 269A Configuration d (TH-55A) series helicopter, while the helicopter was operated by the U.S. Army, is reduced to 1531 hours as defined in Schweizer Service Information Notice No.N-214. All such parts in service or spares inventory, which have exceeded 1531 hours total time in service, must be removed and scrapped.

The TH-55A is a military helicopter with no civil counterpart. For conversion to the Model 269A, contact the manufacturer.

NOTE 8 (a) The retirement times of critical parts for Model 269D are listed in the following table. These values of retirement or service life cannot be increased without approval by FAA Engineering.

(b) Description	Part Number	Model 269D - Hours	Model 269D Config. A - Hours
Main Rotor Blade	269A1185-1	3,050	
	269A1185-5	3,050	
	269D1120-1		5200
Main Rotor Hub-"extended"	269D5307-1 "bolted"	7,500	
	269D5309-1"splined"	7,500	7,500
Pitch Bearing Shaft	269A1240-7	4,000	4,000
Elastomeric Dampers	269A1290-3	6,000	6,000
M/R Input Pinion	269A5103-41	6,000 (restricted to SN 0001 & 0002 only)	
	269A5103-51	6,000	5,000
M/R Drive Shaft	269A5305-25, -125	1,000	
	269D5308-1 "splined"	1,600	1,600
T/R Drive Shaft	269A6040-7,-9,-9M	18,600	18,600
T/R Blade	269A6035-23	12,000	12,000
T/R T-T Straps	269A6065-507	5,100	5,100
Main Rotor Mast	269A2010-9, -19	13,500	13,500
Tail Boom Extrusion	269D3320-1	3,250	5,200
Horizontal Tail	269D3411-1	8,500	8,500
Vertical Tail	269D3510-1	13,000	13,000
Vertical Tail Attach Fitting	269D5301-1	2,700	2,700
	269D5301-7	2,700	5,200
	269D5301-9	2,700	5,200
Engine Drive Adapter	269D5120-3	6,000	6,000
Aft Fuselage Splice Fittings	269D3147-1, -2	3,900	5,200
	269D3311-3, -4	3,900	5,200
	269D3146-1, -2	3,900	5,200
	269D3312-1, -2	3,900	5,200
	269D3310-1, -2	3,900	5,200
	269D3145-1, -2	3,900	5,200
Thrust Bearing-M/R	269A5050-63	2,000	
	269A5050-95	2,000	2,000
KAFLEX Driveshaft	SKCP2738-5,-7	UNLIM	7,600
Carrier Assy.-Ring Gear See item 8(f)	269A5194	6,000	6,000

(c) It is prohibited to interchange life limited components between different series of helicopters (i.e. 369/269). Components which have been interchanged between series of helicopters prior to revision 19 of this TCDS may continue in service to their respective retirement lives. Life limited components interchanged between Models, configurations, or previously between series must be restricted to the lowest service life indicated for the Models or configurations affected. Parts are applicable only on Models under which a service life is listed. Interchanged components with known service hours but without Model application identification may not exceed the lowest life listed for any applicable Model. If the service hours are not known, regardless of Model application, the component cannot be interchanged to Models that list the component as limited life.

(d) Life limited components removed when life limit has been reached must be destroyed or permanently marked to prevent return to service.

(e) Alpha and/or numeric suffixes added to part numbers denote special manufacturing or handling procedures and do not alter the replacement requirements of the part. For example, 269A5305-11 and 269A5305-11M2 are subject to the same requirements.

(f) 269A5193 Carrier is part of 269A5194 Carrier Assembly

NOTE 9. (a) The retirement times of critical parts for Model 269C-1 are listed in the following table. These values of retirement or service life cannot be increased without approval by FAA Engineering.

(b) Description	Part Number	S/N 0001 & Subq Hours
Main Rotor Blade	269A1185-1	5,500
Pitch Bearing Shaft	269A1240-7	4,000
Elastometic Dampers	269A1290-3	6,000
M/R Input Pinion	269A5103-51	8,000
M/R Drive Shaft	269A5305-111	1,900
T/R Drive Shaft	269A6040-7	6,000
Shaft-Input T/R GB	269A5626-5	8,600
T/R Blade	269A6035-23	9,000
T/R T-T Straps	269A6065-507	5,100
Main Rotor Mast	269A2010-5, -15	13,590
Tail Boom Assy.	269A2320-13	2,100
	269A2320-15	4,200
Tail Boom Strut	269A2015-11,-13, -15, -17	10,700
Horizontal Stab.	269A2516-21	4,200
Lower Pulley Coupling Shaft	269A5559-3	6,000
Thrust Bearing-M/R	269A5050-63, -95	4,200
Carrier Assy-Ring Gear see item 9(h)	269A5194	8,000

(c) It is prohibited to interchange life limited components between different series of helicopters (i.e. 369/269). Components which have been interchanged between series of helicopters prior to revision 19 of this TCDS may continue in service to their respective retirement lives. Life limited components interchanged between Models, configurations, or previously between series must be restricted to the lowest service life indicated for the Models or configurations affected. Parts are applicable only on Models under which a service life is listed. Interchanged components with known service hours but without Model application identification may not exceed the lowest life listed for any applicable Model. If the service hours are not known, regardless of Model application, the component cannot be interchanged to Models that list the component as limited life.

(d) Life limited components removed when life limit has been reached must be destroyed or permanently marked to prevent return to service.

(e) The 269A2402 Vertical Stabilizer is part of the 269A2320-13 Tail Boom Assembly. The Vertical Stabilizer has the same service life (2,100 hours) as does the Tail Boom and therefore the vertical stabilizer shall be retired with the Tail Boom Assembly.

(f) Some Parts may appear to be interchangeable between the Model 269C-1 and other 269 series helicopters. However due to differences in maintenance schedules, only the most current dash numbers as defined in Note 9(b) are applicable for installation on the Model 269C-1.

(g) Alpha and/or numeric suffixes added to part numbers denote special manufacturing or handling procedures and do not alter the replacement requirements of the part. For example, 269A5305-11 and 269A5305-11M2 are subject to the same requirements.

(h) 269A5193 Carrier is part of 269A5194 Carrier Assembly.

NOTE 10. Noise Substantiation:

Although not part of the Certification Basis, the Model 269C Helicopter is compliant with the requirements of FAR Part 36 Appendix J, Amendment 20.

…..END…..